Lead Project Scientist

Storm or Project Hurr. Cane Matthew **Experiment type** _____
Flight ID _____ **Mission ID** 20161006I2

Preflight

_____ 1. Participate in general mission briefing.

_____ 2. Determine specific mission and flight requirements for assigned aircraft from the Field Program Director.

_____ 3. Contact HRD members of crew to:
   a. Assure availability for mission.
   b. Review field program safety checklist
   c. Arrange ground transportation schedule when deployed.
   d. Determine equipment status.

_____ 4. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.

_____ 5. Determine from AOC flight director the mission designation and whether aircraft has operational fix responsibility.

_____ 6. Meet with AOC flight crew at least 2 hours before take-off for crew briefing. Provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.

_____ 7. Report status of aircraft, systems, necessary on-board supplies and crews to Field Program Director.

_____ 8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drops.

_____ 9. Make sure each HRD flight crew member has a life vest.

_____ 10. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

In-Flight

_____ 1. Confirm from AOC flight director that satellite data link is operative (information).

_____ 2. Confirm camera mode of operation.

_____ 3. Confirm data recording rate.

_____ 4. Request AOC flight director to leave radar in non-sector mode for initial Figure 4.

_____ 5. Once at IP, request AOC flight director adjust radar tilt to minimize sea clutter.

_____ 6. Complete Lead Project Scientist Form.

_____ 7. Check in occasionaly with the flight director to make sure the mission is going as planned (i.e. turns are made when they are supposed to be made).

Post flight

_____ 1. Debrief scientific crew.

_____ 2. Gather completed forms for mission and turn in to data manager at HRD.

_____ 3. Obtain a copy of the Dropsonde raw and processed files from the AVAPS operator on thumb drive.

_____ 4. Obtain a copy of the radar LF files from the radar technician on thumb drive.

_____ 5. Obtain a copy of the tar'ed radar TA files from the radar scientist on thumb drive.

_____ 6. Obtain a copy of serial flight data and raw NetCDF file on thumb drive from the data technician.

_____ 7. Obtain a copy of SFMR data on thumb drive from the data technician.

_____ 8. Obtain a copy of DMT data on thumb drive from the data technician.

_____ 9. Report landing time, aircraft, crew, and mission status to the Field Program Director.

_____ 10. Determine next mission status, if any, and brief crews as necessary.

_____ 11. Prepare written mission summary using **Mission Summary** form.

Lead Project Scientist Check List

Storm or Project Mathew **Experiment name** _____

Flight ID _____ **Mission ID** 20161006I2

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Ciore	Flight Director	Williamson
Radar/Workstation	Ryan	Pilots	
		Navigator	
Cloud Physics		Systems Engineer	
		Data Technician	
Dropwindsonde	Kalina	Electronics Technician	
AXBT/AXCP		Other	
Photographer/Observers/Guests			

B. Take-off and Landing Times and Locations:

Take-Off: _____UTC Location: _____

Landing: _____UTC Location: _____

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

Storm or Project Matthew **Experiment name**

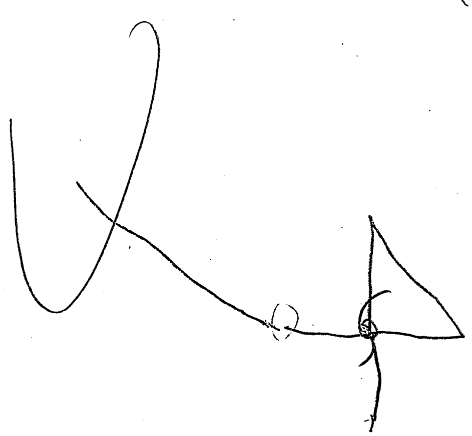
Flight ID **Mission ID** 20161006I2

E. —Equipment Status (Up ↑, Down ↓, Not Available **N/A**, Not Used **O**)

Equipment	Pre-Flight	In-Flight	Post-Flight	# DATs / CDs /Expendables/ Printouts
Radar/LF				
Doppler Radar/TA				
Cloud Physics				
Data System				
GPS sondes				
AXBT/AXCP				
Ozone instrument				
Workstation				
Cameras				

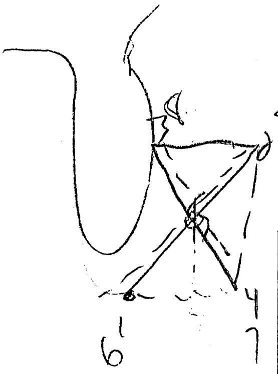
REMARKS:

Air force Tasked Recco
"alpa patter"
w/105 mi legs



Drops in eyewall
eye + end pts

Lead Project Scientist Event Log



Date 10/6/16 Flight ID 20161006I2 LPS Cione

couldn't keep up

Time	Event	Position	Comments
1753	Takeoff	MacDill	
1853	IP	24°30'N 79°36"W	IP.
1918	~~Center~~	25'50 78'22	(6 drops) + 4 Mini Sondes
1920	eyewall/center		dropped 2
1922	eyewall (x2)	2559 7813	935 extrap
Notes:	in midiameter,	6 drops	were done
by	Steven Paul	in rapid	fire fashion
extrap	MSLP @ center	~ 935 mb	(Parrish)
In concentric eyewall			
1941	end pt 2	27'0"N 77'06"	Neg sonde
2013	end pt 3	2716N 7955W	" " "
2037	NW eyewall	2616N 7838W	Sat
	Note: 1.9g	(~19 m/s updraft)	
		~7 m/s downdraft	
2145	Designing	drill (not related	Figure 4)
2200	Center fix	2620N 7848W	NE-SW leg (FF #2)
2325	Center fix	2629N 7854W	SE-NW leg
2333	Outer concentric	eyewall has been rock	
solid all flight.	highly	convective too..	

Lead Project Scientist Event Log

Date ________________ Flight ID________________ LPS ______________________

Time	Event	Position	Comments
00Z	Ne'after 2	Fig 4s	head due
	South	from	NW Pt
	After	all to	SW pt
	proceed	to eye	then exit
	NW	to MacDill	
1:50	Landing	MacDill	
	all	systems	worked
	TD Radar	LF	+ Dropsondes